

Date: Friday, 11/18/2005 5:53:18 PM  
 User: Linda Lacelle

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : LUG BRACKET
Job Number : 24899	
Estimate Number : 10009	
P.O. Number : N/A	Part Number : D27351
This Issue : 11/18/2005 S.O. No. : N/A	Drawing Number : D2735 REV C
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : PURCHASED PARTS	Drawing Revision : C
Previous Run : N/A	Material : N/A
Written By : <u>SEE COMMENT BELOW</u>	Due Date : 12/15/2005 Qty: 50 Um: Each
Checked & Approved By : <u>SEE COMMENT BELOW</u>	
Comment : Est Rev:C Removed from 9 Digit 05-10-25 JLM	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: PURCHASING

Issue P/O: 146

E-mail or Ship DXF file to vendor

Laser cut flat pattern as per Dwg D2735

Possible supplier: Ind. Laser

Material release note is required.

h 05.11.22

2.0	D27351F	Lug Bracket
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 50.0000 Each(s)

Lug Bracket

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Receive &amp; Inspect For Transit Damage

Ensure material certification is attached

50

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

Inspect dimensions per templates D2735-1T1 &amp; DWG D2735

Jacob 12 48 PM

5.0	BRAKE NC	NC BRAKE
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Comment: NC BRAKE



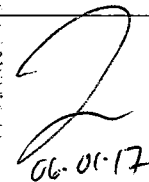

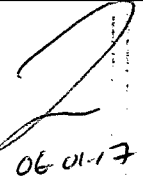
1-Form D2735-1 as per Dwg D2735. Use CNC Brake Jig DT8204

2-Deburr if required.

SP 06/01/26 49

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2735 -1 PAR #: N/A Fault Category: SUPPLIER - NCR: Yes No DQA: L Date: 06/01/27  
INDUST. LASER QA: N/C Closed: Y Date: 06/01/27

NCR: <u>24899</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06-01-17	4	1 part scrap. holes are way off location on one end. holes done during laser cut.		Scrap and destroy	 06-01-17	 06-01-17		 06-01-17

NOTE: Date & initial all entries

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LUG BRACKET

Job Number: 24899

Part Number: D27351

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

06/01/26

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

06/01/26

8.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

545 06/02/01

49

06/01/27

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

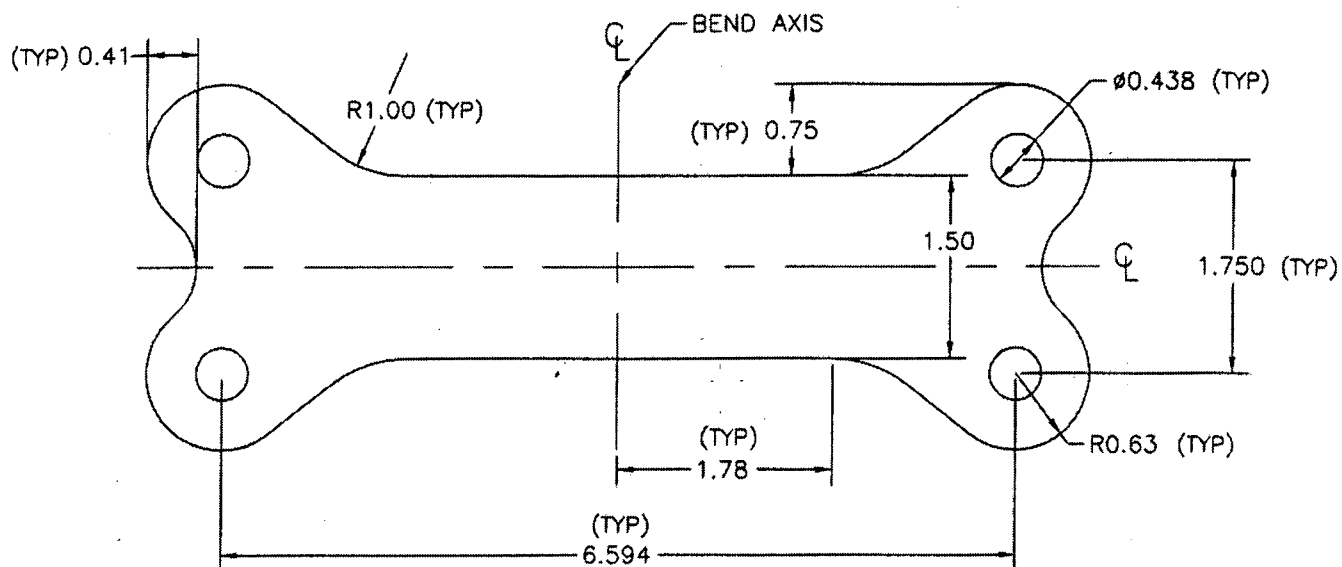
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

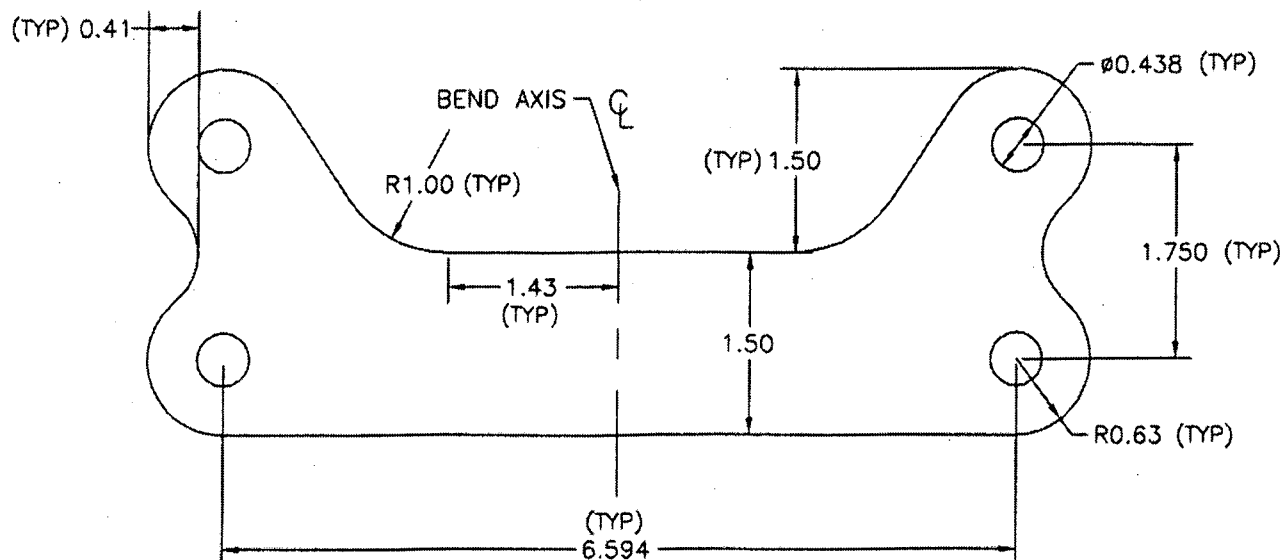


DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2735	REV. C SHEET 1 OF 2
DATE 98.12.14		TITLE LUG BRACKET	SCALE 2:3
A	97.12.14	NEW ISSUE	
B	98.10.23	UPDATE MATERIAL (TSR A1114)	
C	98.12.14	REMOVE TOOLING HOLES (TSR A1040)	

RELEASED  
98.12.14 DS



D2735-1 FLAT PATTERN  
SYMMETRIC ABOUT BOTH CENTRE-LINES (CL)

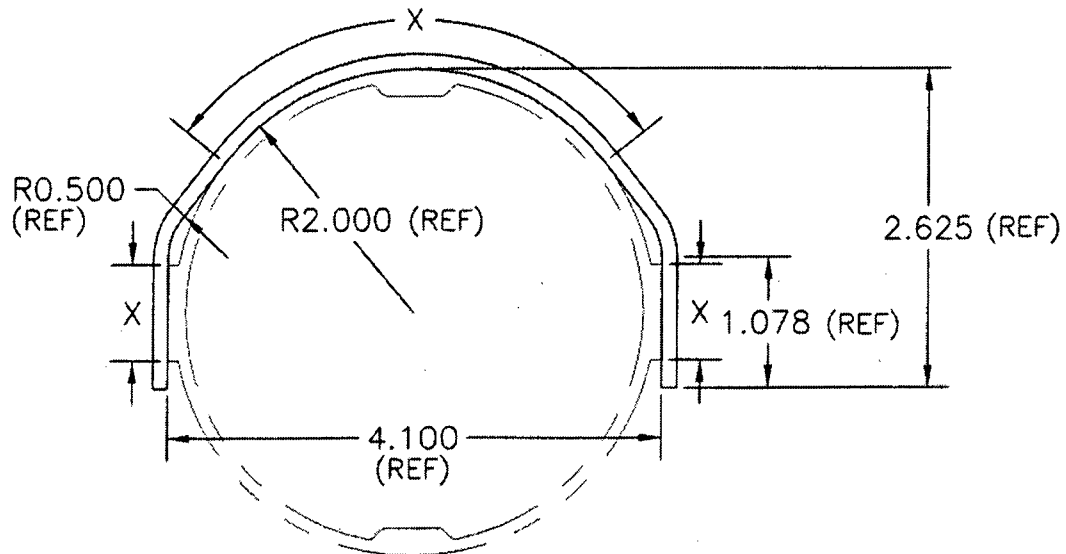


D2735-3 FLAT PATTERN  
SYMMETRIC ABOUT CENTRE-LINE (CL)



DESIGN <i>AT</i>	DRAWN BY <i>AT</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>CP</i>	APPROVED <i>KE</i>	DRAWING NO. D2735	REV. C SHEET 2 OF 2
DATE 98.12.14		TITLE LUG BRACKET	SCALE 2:3

RELEASED  
18.12.14 DS



D2735-1 AND D2735-3 BEND DETAIL

D2735-1 AND D2735-3 SHOULD BE BENT TO WITHIN 0.010 OF THE OUTSIDE PROFILE OF THE D2500-1 EXTRUSION IN THE AREAS INDICATED 'X' ABOVE.

GENERAL NOTES

MATERIAL: ASTM A36/A366/A569/A570 OR AISI 1010-1025 STEEL  
0.125 THICK (11 GAUGE)  
MIN. ULTIMATE TENSILE STRENGTH = 42 ksi  
MIN. YIELD TENSILE STRENGTH = 28 ksi

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
ALL DIMENSIONS ARE IN INCHES

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# Job Costing Report

Dart Aerospace Ltd.  
Hawkesbury

Nov 18, 2005  
09:21 am

Work Order No	:	0024899	Department Code:	
Project Name	:	D2735-1	Burden Flags	: NNNNNNNN
Project For	:	WK550	WO Status	: Open
Work Order Type	:	Main	Invoice State	: Not Invoiced
Main WO Number	:		Invoice Date	:
House Part Number	:	D2735-1	Invoice Number	:
Description	:	Lug Bracket	Invoice Amount	: 0.00
Manufactured	:	Yes		
Amount Req'd	:	50	Order Entry No	:
Amount Done	:	0	OE Value	: 0.00
Start Date	:	11-18-05		
Est Finish Date	:	12-15-05	Est Margin	: 0.000%
Act Finish Date	:		Actual Margin	: 0.000%
Drawings Req'd	:	No		
Ok for Approval	:			
Approval Rec'd	:		\$0 Posted to Finished Goods	

	Estimated	Actual	Var. %	Posted	To Post
Material Cost	0.00	0.00	0.00	0.00	0.00
Engineering Hours	0.00	0.00	0.00		
Engineering Cost	0.00	0.00	0.00	0.00	0.00
Production Hours	0.00	0.00	0.00		
Production Cost	0.00	0.00	0.00	0.00	0.00
Packaging Hours	0.00	0.00	0.00		
Packaging Cost	0.00	0.00	0.00	0.00	0.00
OverHead Hours	0.00	0.00	0.00		
OverHead Cost	0.00	0.00	0.00	0.00	0.00
CNC Hours	0.00	0.00	0.00		
CNC	0.00	0.00	0.00	0.00	0.00
Misc. Hours	0.00	0.00	0.00		
Misc.	0.00	0.00	0.00	0.00	0.00
Burden	0.00	0.00	0.00		
Total Cost	0.00	0.00	0.00		
Margin	0.000	0.000			
Selling Cost	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done	0.00	0.00
Profits/(Loss)	0.00	0.00



New Zealand Steel Limited  
Glenbrook, South Auckland  
Postal: Private Bag 92121, Auckland, New Zealand  
Telephones: (09) 375 8999 / 375 8111 Auckland  
(09) 235 8089 / 235 3535 Waiuku  
Fax: (09) 375 8959

# TEST CERTIFICATE

Ref: 5078/21768

CUSTOMER	Wilkinson	P50128ME003	SPECIFICATION	ASTMA1011 CS Type B	CERTIFICATE No	TC109570
CUSTOMER O/N	90-31N-544		PRODUCT	HOT-ROLLED PICKLED & OILED	PAGE	1 of 1
MILL O/N	471702		DIMENSIONS	0.119" x 48" x Coil	DATE	23 April 2005

PACK NUMBER	(Sample) HEAT No	CHEMICAL COMPOSITION PERCENT															MECHANICAL TESTS (TEST SPECIFICATION - ASTMA370)								
		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	Al	B	N2	CE( )	BEND	YIELD	T.S.	%ELONG	HARDNESS	r	LENGTH	
		x100			x1000										x10000		x100	180°				G.L.=		( )	(feet)
HP-959386-00	640944	5	1	19	12	20	12	18	19	1	5	1	1					Good						820	
HP-959387-00	640944	5	1	19	12	20	12	18	19	1	5	1	1					Good						837	
HP-959388-00	640944	5	1	19	12	20	12	18	19	1	5	1	1					Good						837	
HP-959389-00	640944	5	1	19	12	20	12	18	19	1	5	1	1					Good						827	

YIELD	GAUGE LENGTH (G.L.)	PLASTIC STRAIN RATIO (r)	IMPACT TEST	(C)=5mm x 5mm	CARBON EQUIVALENT VALUE (CE)
(A)=0.2% PROOF STRESS	(A)=200mm (C)=80mm (E)=2"	(A)=r0 (C)=r45	(A)=10mm x 10mm	(D)=2.5mm x 10mm	(A)=C+Mn/6
(B)=LOWER YIELD STRESS	(B)=50mm (D)=5.65 + So (F)=8"	(B)=r90 (D)=(r0+r80+2r45) / 4	(B)=7.5mm x 10mm	(E)=5mm x 10mm	(B)=C+Mn/6+(Cr+V+Mo)/5+(Cu+Ni)/15
					(C)=C+Mn/6+Si/24
					(D)=

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION

APPROVED *Satish Misra*  
QC METALLURGIST

*Uga HR 00*

*P02 146*

*06-01-17*